

ABSTRACT OF THE DISCLOSURE

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5 An optical wiring substrate provides a slab optical waveguide having a refractive index different from a refractive index of other surrounding portions and a planar convex lens being provided continuously to a tip portion of an optical path of an optical wave guide including a core and cladding and formed on a substrate .

10 The optical path of light passing through the planar convex lens is converted approximately by 90° with a mirror. The light reflected with the mirror is made as parallel light rays by use of a cylindrical lens.